

FIGURE 1

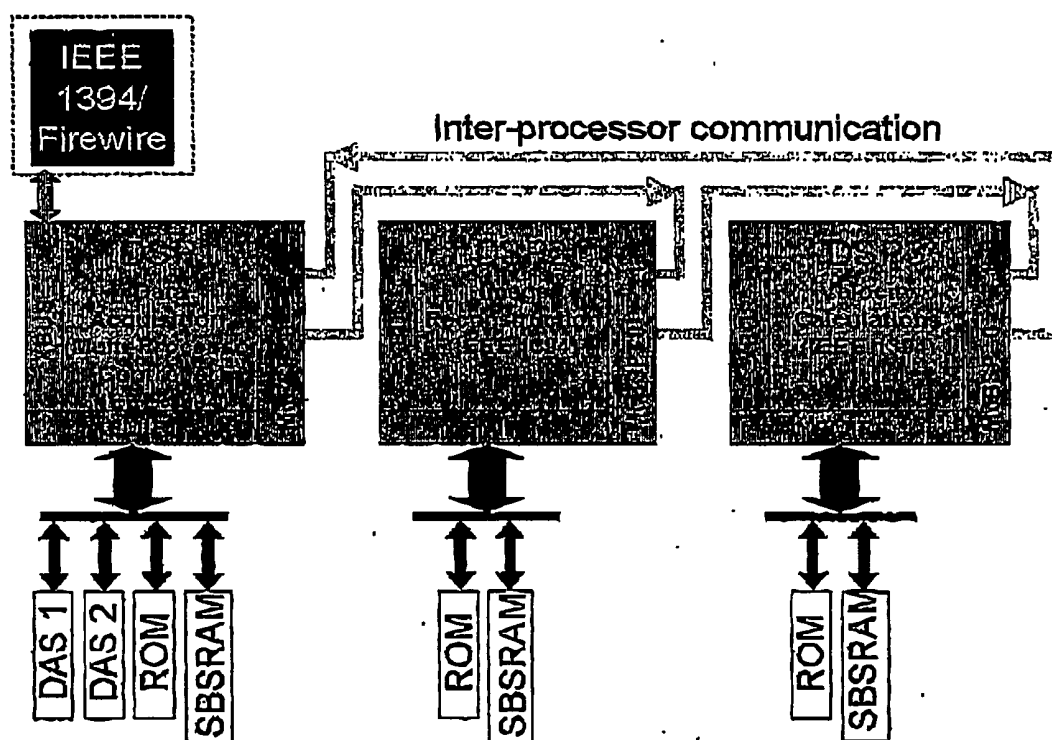


FIGURE 2

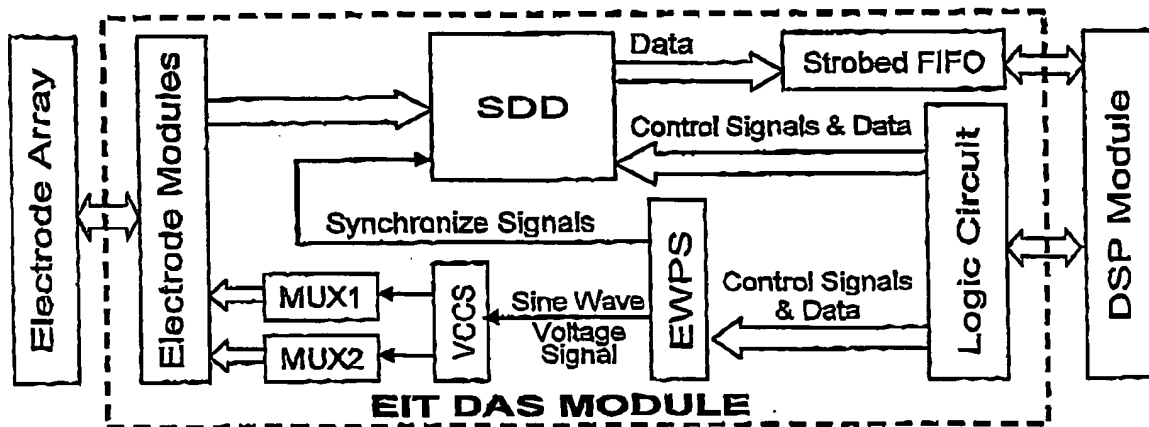
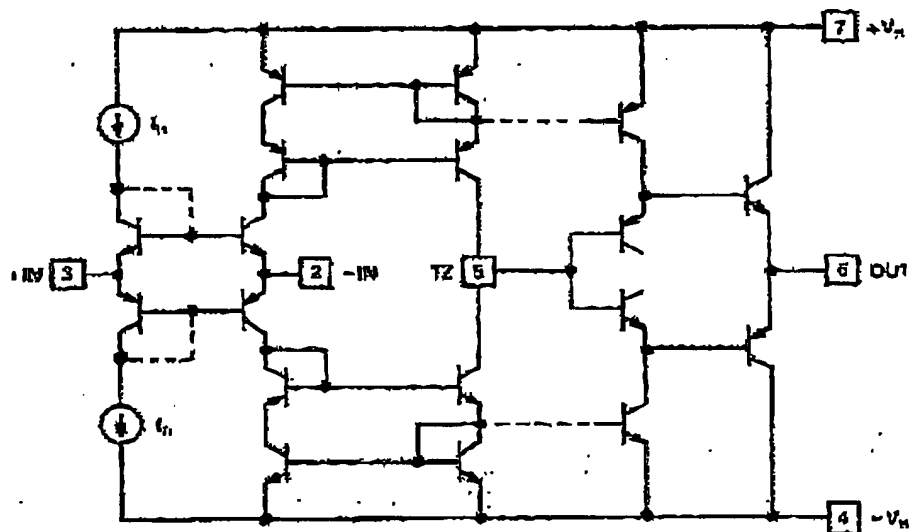
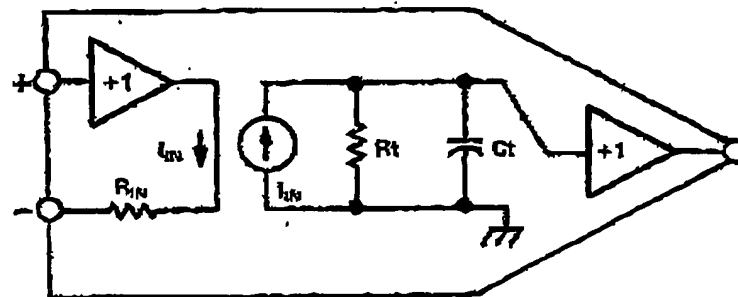


FIGURE 3



(a) Simplified Schematic



(b) Equivalent Schematic

FIGURE 4

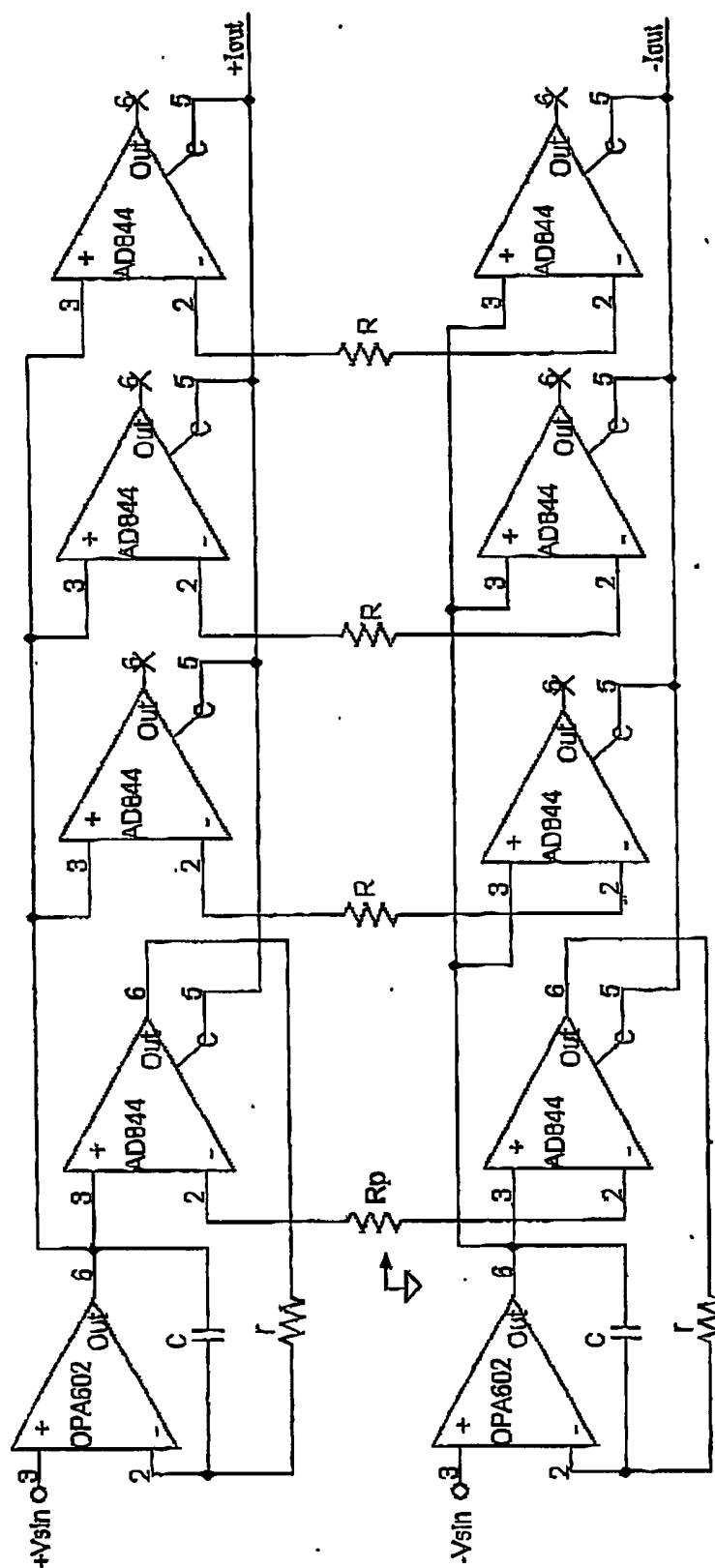


FIGURE 5

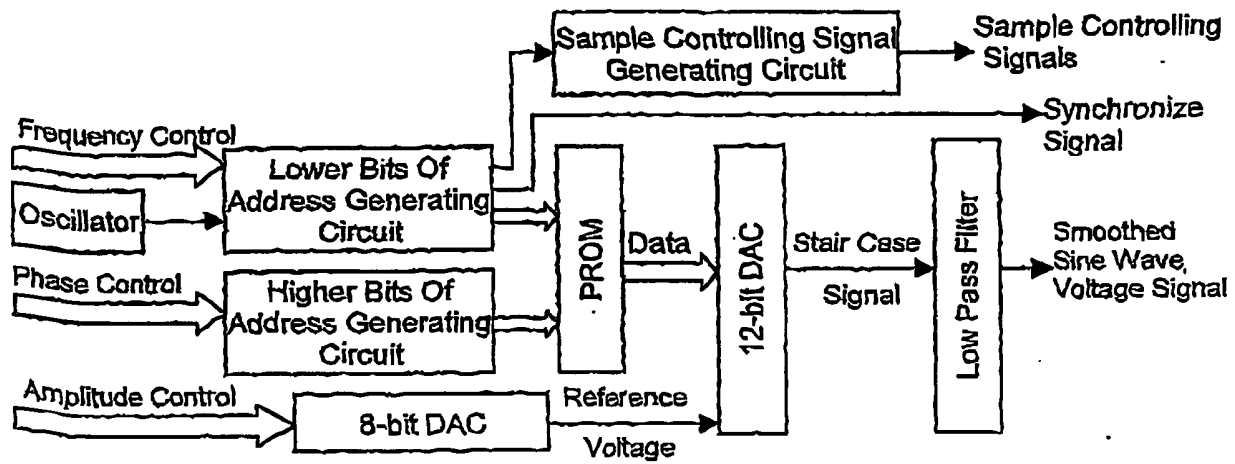


FIGURE 6

Equal width pulse sine-wave

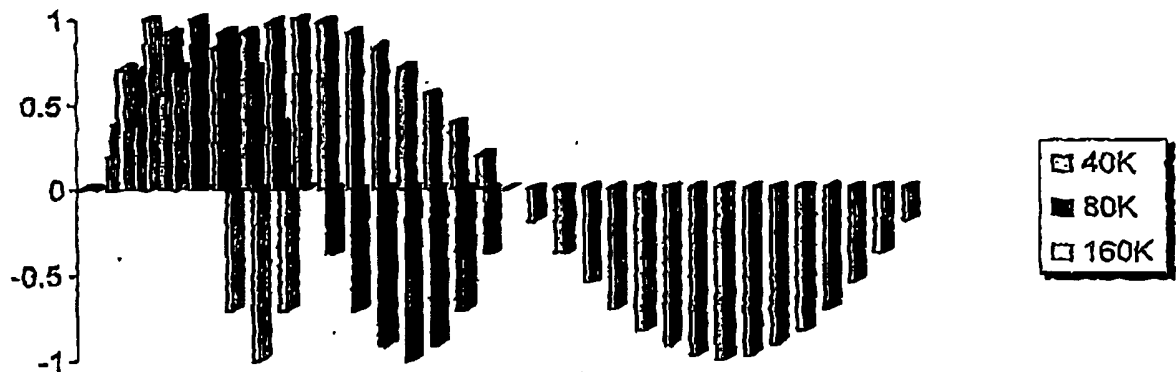


FIGURE 7

5/11

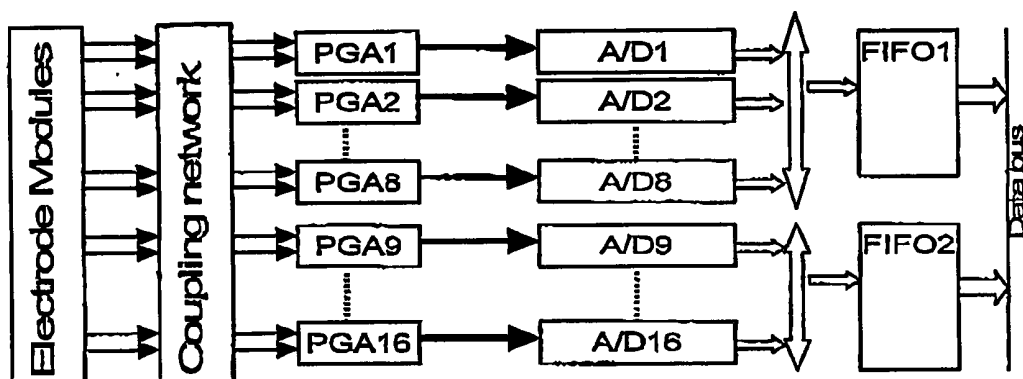


FIGURE 8

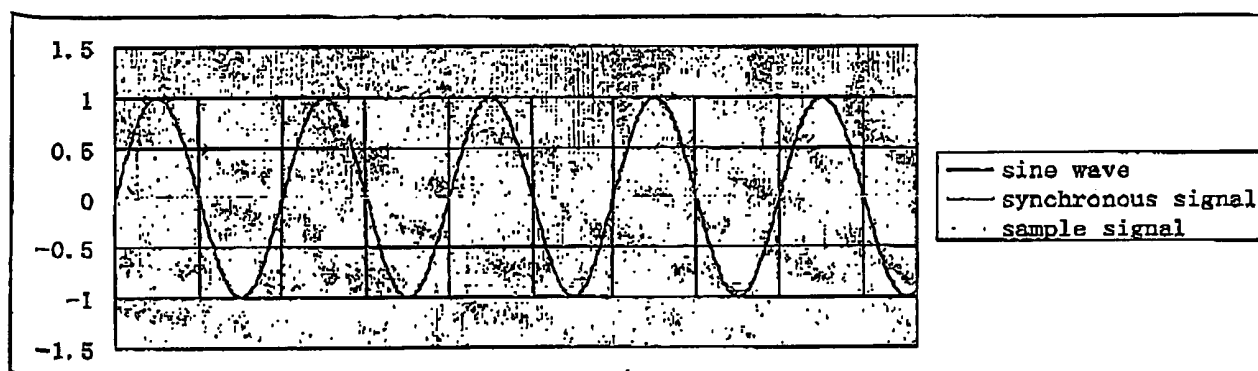
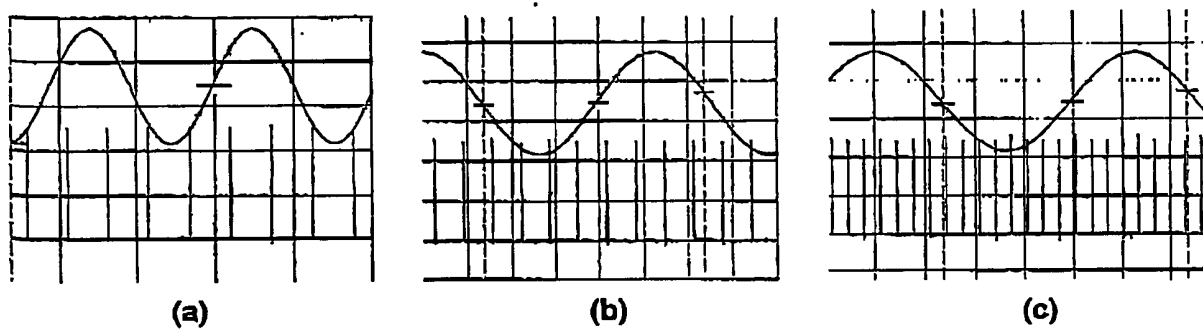


FIGURE 9

6/11

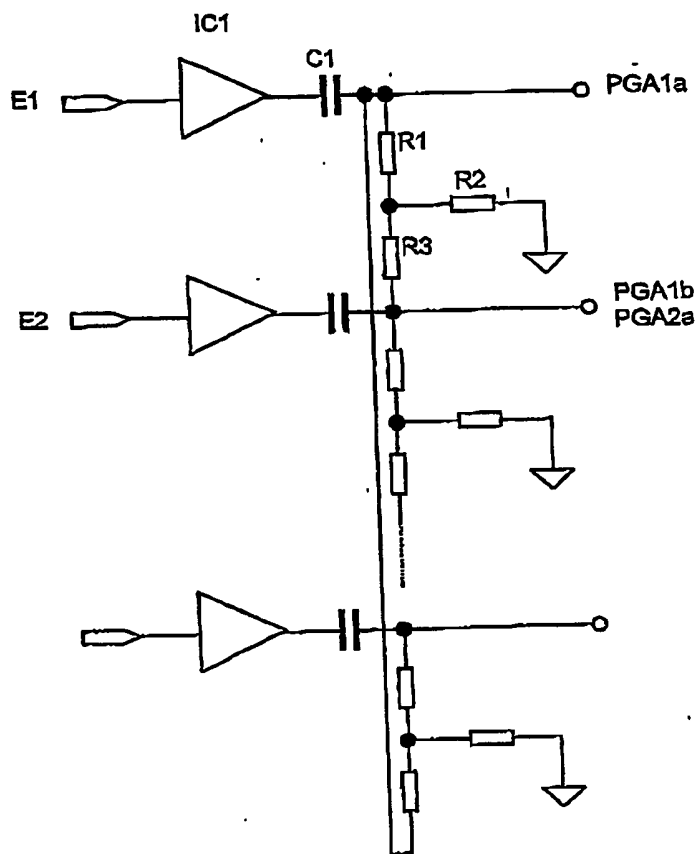


FIGURE 10

7/11

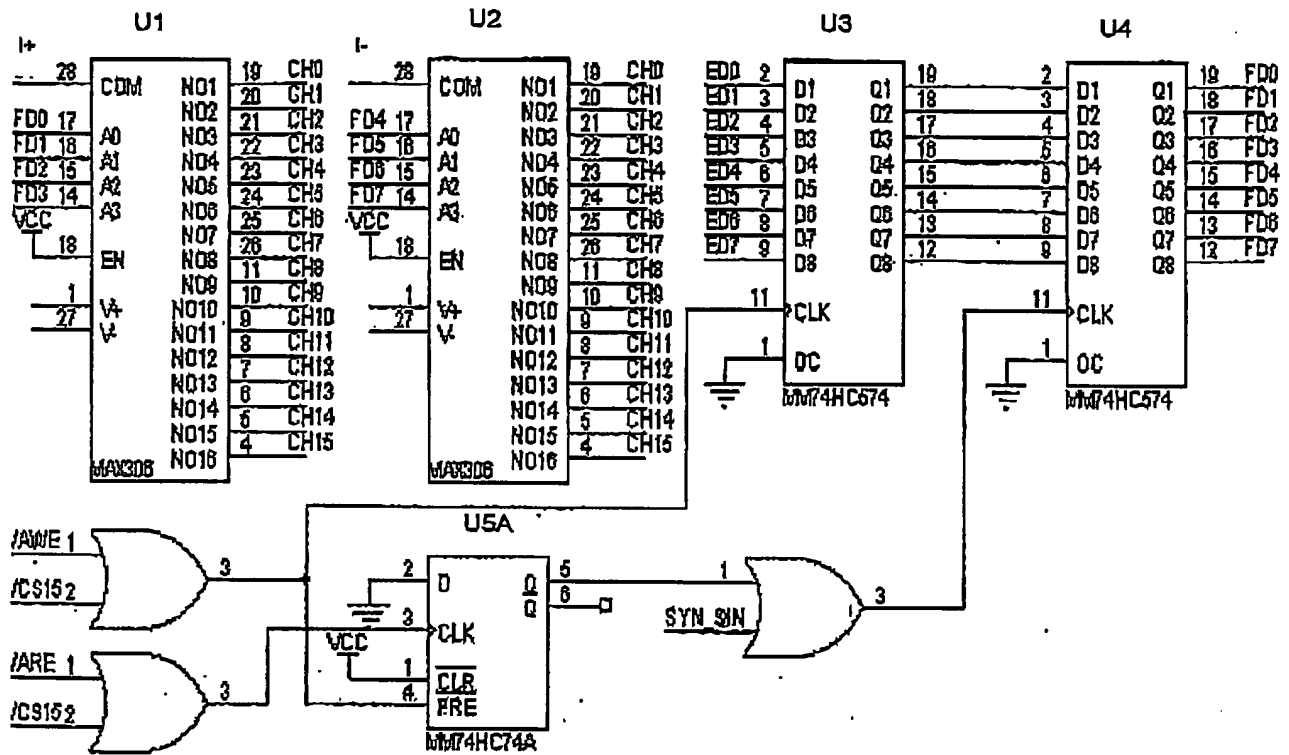


FIGURE 11

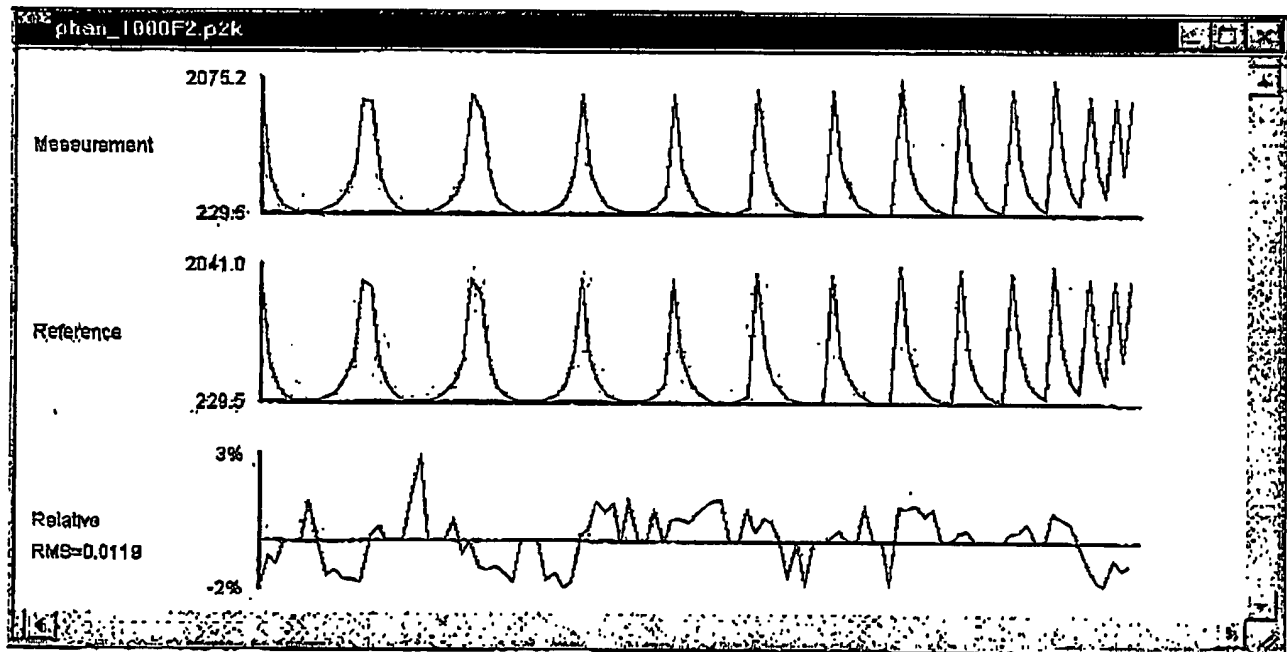


FIGURE 12

8/11

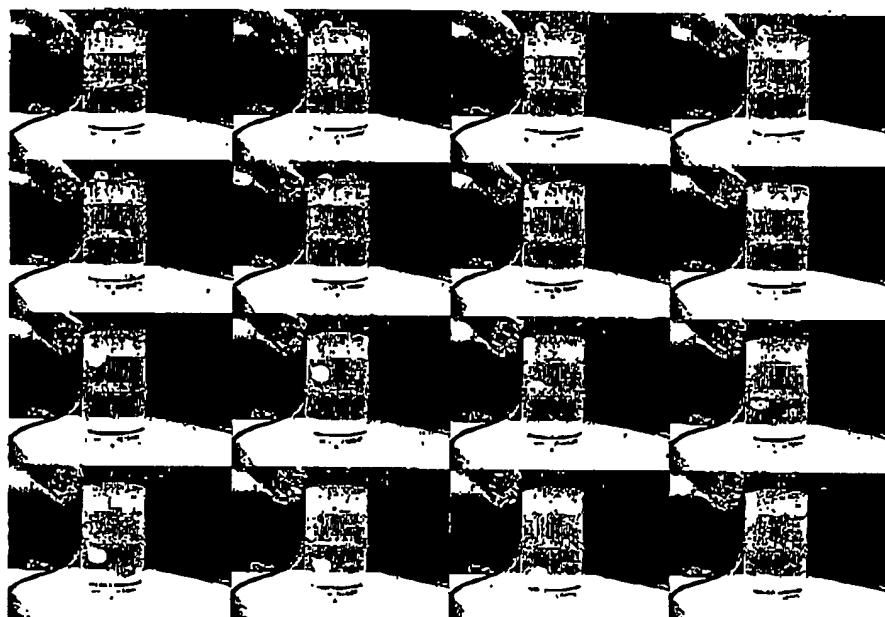


FIGURE 13



FIGURE 13b



FIGURE 13c



FIGURE 13d



9/11

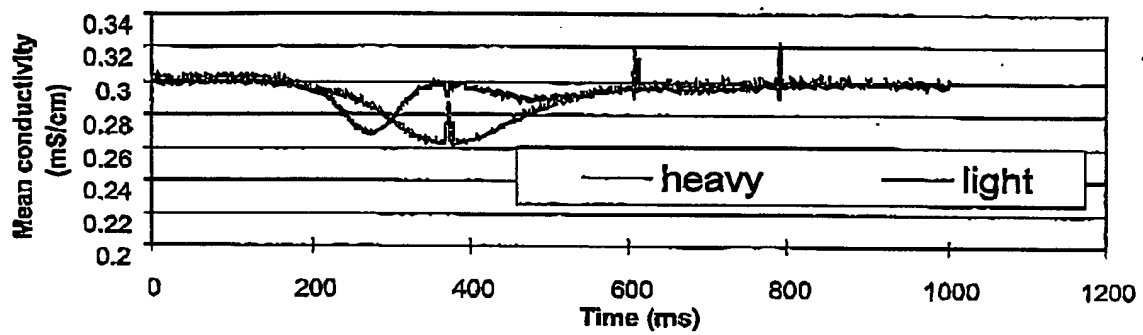
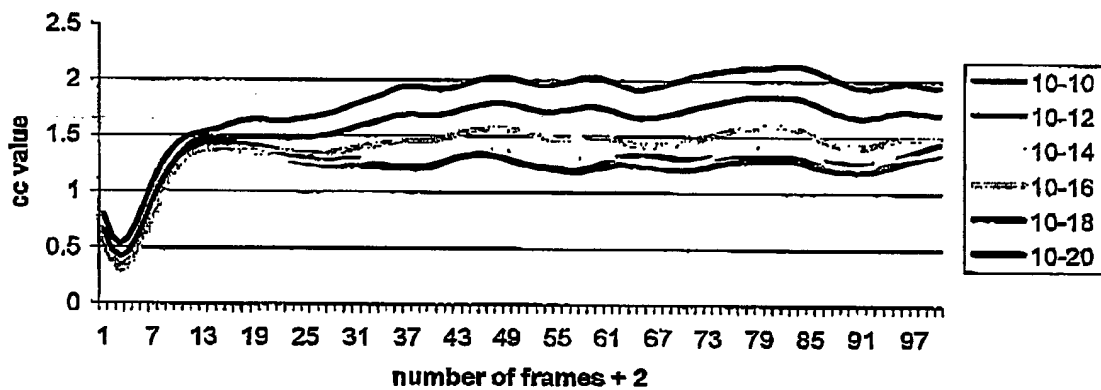


FIGURE 13e

cc curve - SH1



(a) Data collected from an air-water flow (SH1) at  $f=134.2$  fps,  $d=5$ cm

FIGURE 14(a)

10/11

CC curve - m4

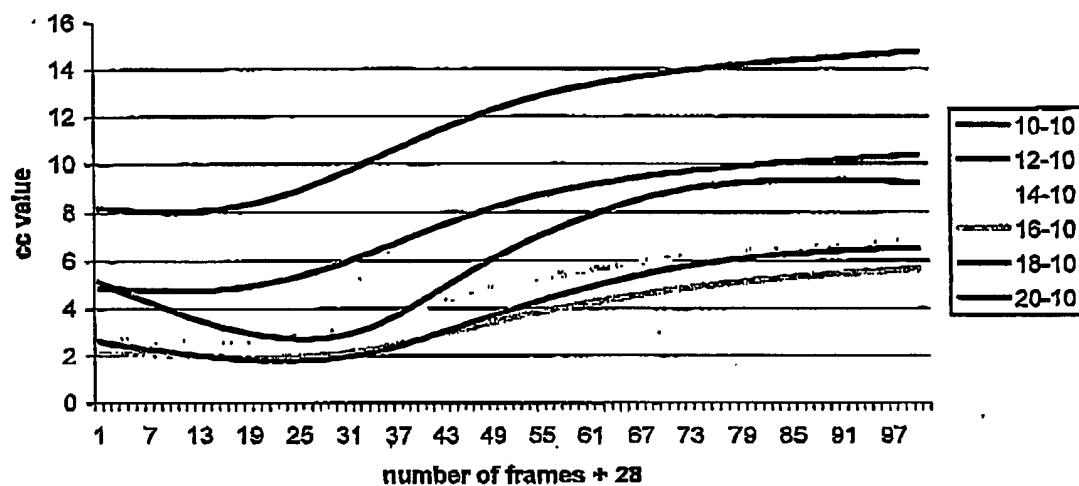
(b) Data collected from an oil-water flow (M4) at  $f=914.3$  fps,  $d=3$ cm.

FIGURE 14(b)

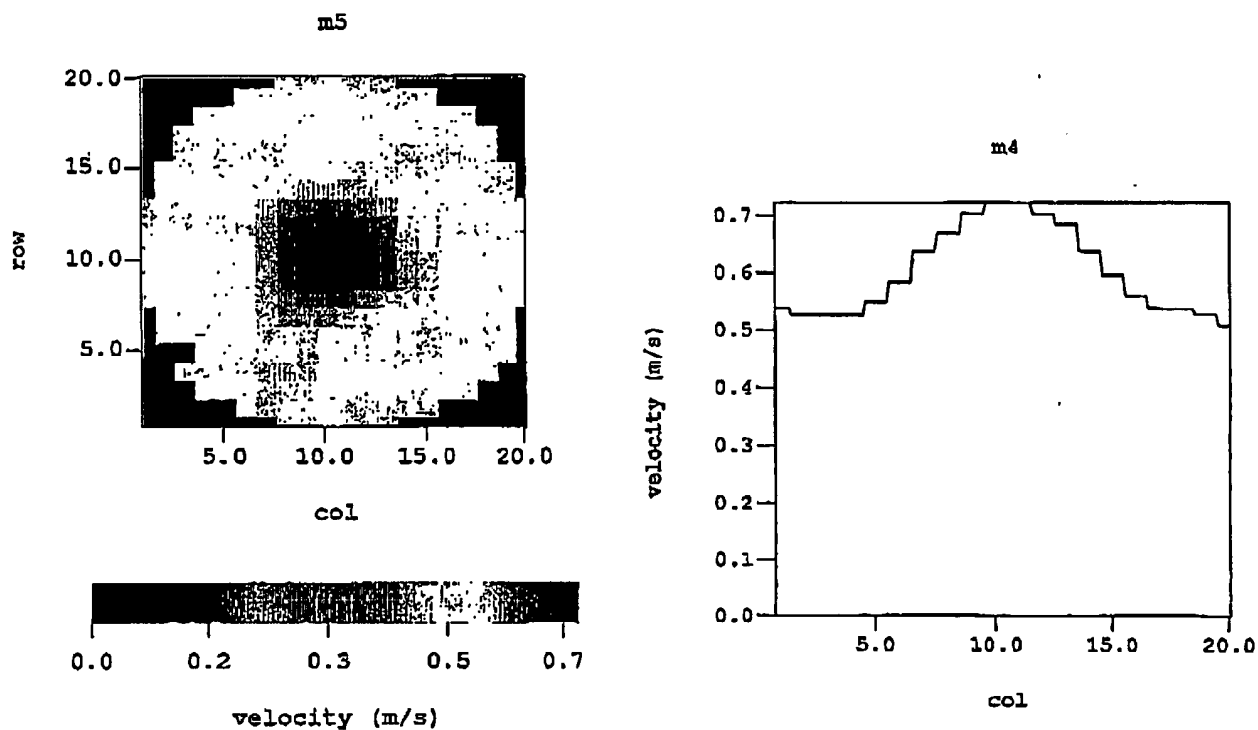
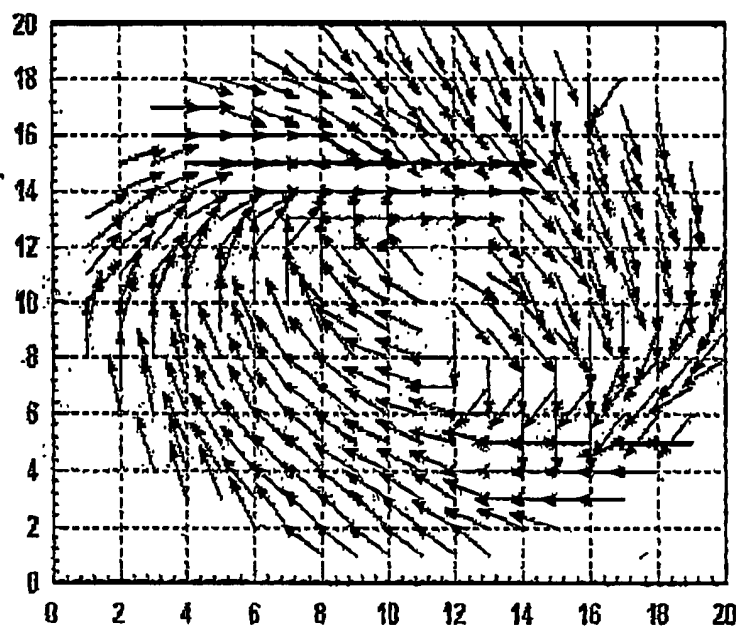
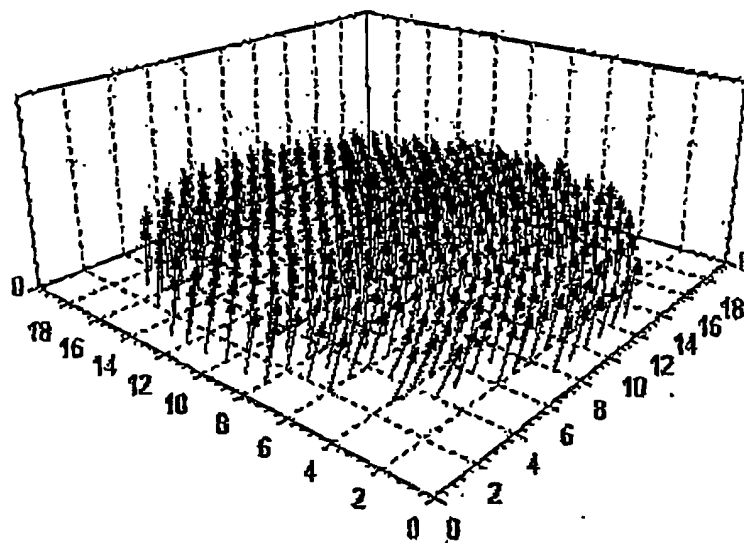


FIGURE 15

11/11



(a)



(b)

FIGURE 16